DOCUMENT RESUME

ED 140 168 CG 011 447

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TITLE The Factorial Measurment of Master's Level Clinical Functions in Mental Health Agencies.
PUB DATE [75]
NOTE 34p.; Tables and figures may reproduce poorly; Paper presented at the Annual Conference of the Southwestern Psychological Association (Albuquerque, New Mexico, April 29-May 1, 1976)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Employment Qualifications; Factor Analysis; *Job Analysis; Job Skills; Masters Degrees; Measurement Techniques; *Mental Health Clinics; Professional Training; *Psychological Services; *Psychologists; Research Projects

ABSTRACT

This research is part of an effort to assess the job functions required of master's level clinical psychologists, to simplify their relationships through factor analysis, and to develop factor scales for the measurement of job functions required at mental health agencies. In response to an earlier questionnaire, 20 master's level clinical functions had been either endorsed or not endorsed by chief psychologists at 396 mental health agencies. In the first part of this study, those cases were divided into halves, with each half randomly selected so as to provide proportional representation from each of nine mental health agency types. Then, both halves were factor analyzed using three different rotational methods in order to determine which method most reliably reproduced which factors in both samples. It was found that the orthogonal rotation most reliably replicated four factors. In the second part of the study, the entire sample was factor analyzed, and factor scores for each of the four most reliable factors were recorded for each case. Mean factor scores were generated for each of nine mental health agency types, and displayed graphically. (Author)

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The Factorial Measurement of Master's Level Clinical Functions in Mental Health Agencies

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In the design of curricula for the optimal training of master's level clinicians the most practical guidelines will come from systematically gathered information about the functions which they actually perform in clinical settings. One source for such information comes from a survey (Smith and Soper, 1974) conducted in 1972-1973. In that survey, 400 heads of psychology departments in 22 western states checked each of 14 clinical functions which were actually being performed by master's level clinicians in their agencies. They also were asked to select each of six master's level training models which they most preferred.

Soper and Smith (1975) factor analyzed that data for the 400 agencies from which reports were obtained for both "functions performed" and "models preferred." The seven resulting factors, together accounting for 62.9% of the total variance, were labeled: Outpatient Therapy, Inpatient Therapy, Community Mental Health, Research Assistant, Inpatient Ward Management, Psychological Testing, and Other Functions.

As Soper and Smith (1975) suggested, however, a more immediate practical application is possible when factor analysis is followed by factor scaling. Factor score "profiles," which show the relative importance of each factor could be constructed. Profiles for indi-

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vidual agencies would be of some interest to the graduating master's degree student who might be wondering which functions and models are emphasized at a specific prospective place of employment.

Of greater general interest for the development of master's level clinical training programs, however, would be the construction of mean factor score profiles for different types of mental health agencies. From them, as Soper and Smith (1975) suggested, it would be possible to develop a training program in such a way as to optimally prepare its graduates for any particular agency type, or for those several types offering the best sources of employment.

The present study has extended the line of research begun by Smith and Soper (1974) and Soper and Smith (1975). Initially, Soper and Smith's (1975) factor analysis of master's level clinical functions and preferred training models was replicated on the same data. More sophisticated procedures were used to confirm the reliability of factors and the best method of rotation. Following that came a new phase in which individual agency factor scores and mean factor scores by agency type were computed. Finally, differences among specific agency types on specific factors were examined.

Summarizing the major steps in more detail: (a) 20 master's level clinical functions and training models were either endorsed, or not endorsed by chief psychologists from 396 mental health agencies. (b) The 396 cases were divided into two halves, with each half randomly selected to provide proportional representation from each facility type, and the two halves were separately factor analyzed. (c) Several methods of rotation were examined. The method selected was the one which most reliably reproduced the same factors

in both samples. (d) The entire sample was then factored, and factor scores for each reliable factor were obtained for each case. (e) As a check on the quality of the factor scores, the intercorrelations of the factor scores were computed and compared with the expected intercorrelation of factors. (f) Mean factor scores for each of nine mental health agency types were generated and displayed graphically. (g) Planned comparisons were made between mean factor scores for three of the four reliable factors retained. On the basis of data reported by Smith and Soper (1974), the following specific planned comparisons were tested:

Factor I: Outpatient Therapy. Community Mental Health Centers were expected to have higher mean factor scores than either State or VA Hospitals.

Factor II: Inpatient Therapy. State Hospitals, VA Hospitals, and Adolescent Treatment Centers were expected to have higher mean factor scores than Community Mental Health Centers.

Factor III: Research Assistant. VA Hospitals were expected to be higher than State Hospitals.

Factor IV: Psychological Testing. No planned comparisons were made.

Results

The analyses were performed by computer using the programs contained in the "Statistical Package for the Social Sciences" (SPSS) (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). The study consisted of four major steps: First, "common" factor analysis (Gorsuch, 1974) procedures were applied to two stratified random halves of the sample to determine the most reliable factors

to retain for further analysis, and to determine the method of rotation which best fit the data. Second, common factor analysis with an orthogonal (varimax) rotation, was applied to the complete set of data to obtain the final factor structure and estimated factor scores for each reliable factor. Third, the intercorrelations of factor scores were obtained, and the resulting matrix was compared to the expected matrix of intercorrelations among factors. Finally the means and standard deviations for factor scores were computed for each agency type. Planned comparisons were made to test specific expected differences among mental health agencies.

Common factor analyses with three alternate methods of rotation were performed separately on two random halves of the total sample of 396 cases. There were two purposes: (a) to select the method of rotation which best produced matching factors across both samples; and (b) to select those factors which were most reliably extracted across both samples and rotational methods.

Tables 3, 4, and 5 display rotated factor loadings for both samples produced by the orthogonal, oblique (delta = -5.00), and oblique (delta = 0.00) rotations, respectively. Rather than presenting factors in the more conventional order of their extraction, only those factors which appeared to be similar across both samples are presented in pairs.

Selection of Rotational Method.

A comparison of the paired factors displayed in Tables 3, 4, and 5 reveals the superiority of the orthogonal method of rotation (Table 3) in producing similar factors across both samples. Using .35 as the minimum criterion for a salient loading, the orthogonal

method produced three factors with perfectly matching loadings in each half, and a fourth factor (AIV, BIII) on which only one of three salient variables was not replicated (Table 3).

By contrast, the oblique rotation (delta = -5.00) produced only one perfectly replicated factor (AI, BI). For the remaining three partially replicated factors the ratios of unreplicated to total salient variables were 1/4 (AII, BII) 2/5 (AIII, BIII), and 4/8 (AIV, BVI) (Table 4). The oblique rotation (delta = 0.00) again produced only one perfectly replicated factor (AVII, BIV), while the remaining similar factors ranged from 1/5 (AI, BI) to 4/8 (AIV, BV) non-replicated salient variables.

Reliability of Factors.

The information shown in Tables 3, 4, and 5 was also used to determine the most reliable factors to be retained in later analyses. The four factors which were best replicated across both halves by the orthogonal rotation also appeared most reliably for the two oblique methods of rotation. For this reason, it was decided that those four factors would be emphasized in the later analyses since they could be assumed to be those most likely to appear in new samples of cases.

The first factor (AI, BII; Table 3) loaded highly on Inpatient Individual Therapy, Inpatient Group Therapy, and Ward Milieu Coordination. It also appeared for both of the oblique rotation methods (AII, BII; Table 4) (AII, BII; Table 5) except that those methods also produced salient loadings on Token Economy Coordination for Group A.

The second factor (AIII, BI; Table 3) loaded on Outpatient

Individual Therapy, Outpatient Group Therapy, Prevention or Crisis Intervention, and Community Consultation. It was also replicated by the oblique (delta = -5.00) rotation (AI, BI; Table 4) and oblique (delta = 0.00) rotation (AI, BI; Table 5) with an additional loading on the Community Consultant training model by the last rotation on Group A (Table 5).

The third factor (AVII, BV; Table 3) loaded on Psychological Testing and the Psychometrician training model. It was replicated well across both halves by the oblique rotation (delta - 0.00; Table 5, AVII, BIV) but poorly by the oblique rotation with delta = -5.00 (Table 4).

For the fourth factor (AIV, BIII; Table 3) there were replicated loadings on Research Assistance and the Research Technician model, with a non-replicated loading on the Other training model variable only for Group A. In the other two rotations the two replicated loadings were again replicated across both samples, although there was a less reliable tendency for loadings to also occur on Independent Research and Other models (AIII, BIII; Table 4) (AIII, BIII; Table 5).

Factor Extraction and Factor Scaling on Entire Sample.

Following the results of the first analyses, the entire sample of 396 cases was factor analyzed by the PA2 (common) method. The method of rotation was orthogonal, since that had been shown to most reliably reproduce the same factors in the two halves.

Table 6 shows the seven rotated factors with their salient loadings, extracted according to the criterion that sums of squared loadings should be greater than or equal to one. Since it was

determined that only four factors could be considered most reliable from the first analyses, it will be only those four factors which will play a significant role in the factor scaling procedures. Those factors are shown in Table 6 with all variable loadings, since the computer technique for determining factor scores used all variables in estimating those scores. The salient factor loadings for those four factors are indicated with an asterisk, while for the remaining three less reliable factors, only the salient loadings are shown. The most reliable factors were factors I, II, IV, and VI, in order of extraction. They will be renumbered I-IV in the remaining analyses, and the other factors will be ignored.

Factor I, labeled "Outpatient Therapy", accounted for 17% of the total variance and loaded saliently on Outpatient Therapy (.86), Outpatient Group Therapy (.76), and Community Consultation (.37).

Factor II, "Inpatient Therapy", had salient factor loadings on Inpatient individual Therapy (.81), and Inpatient Group Therapy (.84), and accounted for 13.9% of the total variance.

Factor III (IV in Table 6), called "Research Assistant", had salient loadings on Research Assistance (.66), Independent Research (.35) and the training model, Research Technician (.66). The Research Assistant factor accounted for 6.8% of the total variance.

Factor IV (VI in Table 6), "Psychological Testing", accounted for 5.6% of the total variance. It loaded highly on Testing (.74) and the training model, Psychometrician (.42).

The four factors together accounted for 43.3% of the total variance.

Estimation and Evaluation of Factor Scores.

Seven estimated factor scores for each of the 396 cases were computed and punched on a set of data cards. One way of evaluating the adequacy of estimated factor scores is to compare the matrix of their intercorrelations with the actual or expected matrix of intercorrelations among the factors themselves. For the method of factoring used with an orthogonal rotation the expected intercorrelations among factors is a matrix with ones in the diagonals and near-zero correlations among all other factors.

Table 7 shows the obtained intercorrelations among factor scores. It can be seen that the match between the matrix of intercorrelations among factor scores (Table 7) and the expected intercorrelation among factors is very close. The diagonals are unity, while all other elements show extremely low correlations, with the largest ($\underline{r}$ FS_I, FS_V = .1870) indicating less than 4% common variance between the two sets of factor scores.

Differences Among Mental Health Agency Types on Four Reliable Factors.

Four factors were earlier found to appear most reliably across random halves and methods of rotation: Factor I: Outpatient Therapy; Factor II: Inpatient Therapy; Factor III: Research Assistant; Factor IV: Psychological Testing. The remaining analyses were: (a) to test predictions that certain agency types would differ on specific mean factor scores: and (b) to display mean factor score profiles for those agency types involved in those comparisons.

Planned Comparisons.

Table 8 shows mean factor scores and standard deviations for all agency types on each reliable factor. Table 9 shows the planned

comparisons , their t values, and significance levels for differences predicted among mean scores for Factors I, II, and III. Figure 1 shows mean factor score profiles for the four agency types involved in the planned comparisons.

Each of the six predicted differences were highly significant. For Factor I (Outpatient Therapy), Community Mental Health Centers were significantly higher than both State Hospitals ($t_{387} = -6.331$, p less than .001) and Federal (VA) Hospitals ($t_{387} = -3.407$, p less than .001) (Table 9, Figure 1).

For Factor II (Inpatient Therapy) Community Mental Health Centers were significantly lower than State Hospitals ($t_{387} = 6.740$, p less than .001), and Federal (VA) Hospitals ($t_{387} = 3.435$, p less than .001), and significantly higher than Adolescent Treatment Centers ($t_{387} = -2.229$, p less than .026) (Table 9, Figure 1).

For Factor III (Research Assistant), Federal (VA) Hospitals were significantly higher than State Hospitals ($t_{387} = -3.308$, p less than .001) (Table 9, Figure 1).

Factor IV has not been reported in this section since a priori comparisons were made for it.

Group mean factor profiles for the five agency types not involved in the planned comparisons can be found in Figures 2 and 3.

Discussion

This study has served to advance and refine the work originally reported in Smith and Soper (1974) and Soper and Smith (1975). It has been shown that, using the survey data presently available, master's level clinical functioning in the western states tend to be represented most reliably by four orthogonal factors:

Outpatient Therapy, Inpatient Therapy, Research Assistant, and Psychological Testing.

Equally high loadings by Outpatient and Inpatient Therapy factors on both group and individual therapy suggest that master's level training should give equal emphasis to both, regardless of whether training is directed toward outpatient or inpatient settings.

The conceptual nature of these four most reliable factors may reflect the fact that master's level clinical functions are modeled after the three traditional functions of the doctoral-level scientist-practitioner: assessment, therapy, and research. It may also be, however, a reflection of bias introduced into the list of function variables when they were originally, and somewhat arbitrarily, set down. Future research will stress the more representative sampling of function variables, and answers to the above questions should then be forthcoming.

The most unique contribution of the present study has been its demonstration of the feasibility and value of scoring mental health agencies on factorially-derived scales. Those scales indicate their relative emphasis on various clinical functions performed by master's level psychologists. Thus, we have shown here the rarely demonstrated, but not surprising fact that master's level clinicians do more outpatient therapy in Community Mental Health Centers than they do in State or VA Hospitals. By the same token it was demonstrated that inpatient therapy is a more important function in the two hospital settings. Perhaps of greater interest, because of its less "obvious" nature, was the finding that their performance as a research technician is a more important function for master's level

psychologists in VA Hospitals than for either State Hospitals or Community Mental Health Centers.

Findings such as these are of potential interest to three different types of consumers: the applied mental health agency, the master's level student in training or about to graduate, and those involved in his or her training. The mental health agency itself may be interested to know what functions are being emphasized by its own master's level clinicians. A comparison of its individual factor profile with the mean profile for its agency type would suggest ways in which it deviated from the mean.

The student in training would surely benefit from knowing what course work he should emphasize in his program in order to best prepare for employment in a particular type of agency. Individual agencies advertising open positions could be asked to respond to the clinical function items of the original questionnaire. Their factor profiles could then be constructed and handed out to students who might be interested in applying for the job.

The value of providing data-based input into the development of training programs for master's level clinicians appears obvious. It would appear to be particularly important to train master's level psychologists in those functions which will be required of them in the field, since they are expected to work under supervision.

Future research will stress the more adequate sampling of variables from the domain of possible clinical functions. Also, current data has been based on indirect reports about what master's level psychologists are doing, obtained from their supervisors. It might be better to find out directly from the master's level clinician, himself. A third important refinement will involve the development

of continuous scaling methods for the measurement of work functions; to provide data more suitable for factor analytic techniques. Finally, we will be obtaining comparable data on doctoral as well as master's level clinicians, to provide a better basis for comparing their respective factor structures for the domain of clinical work functions.

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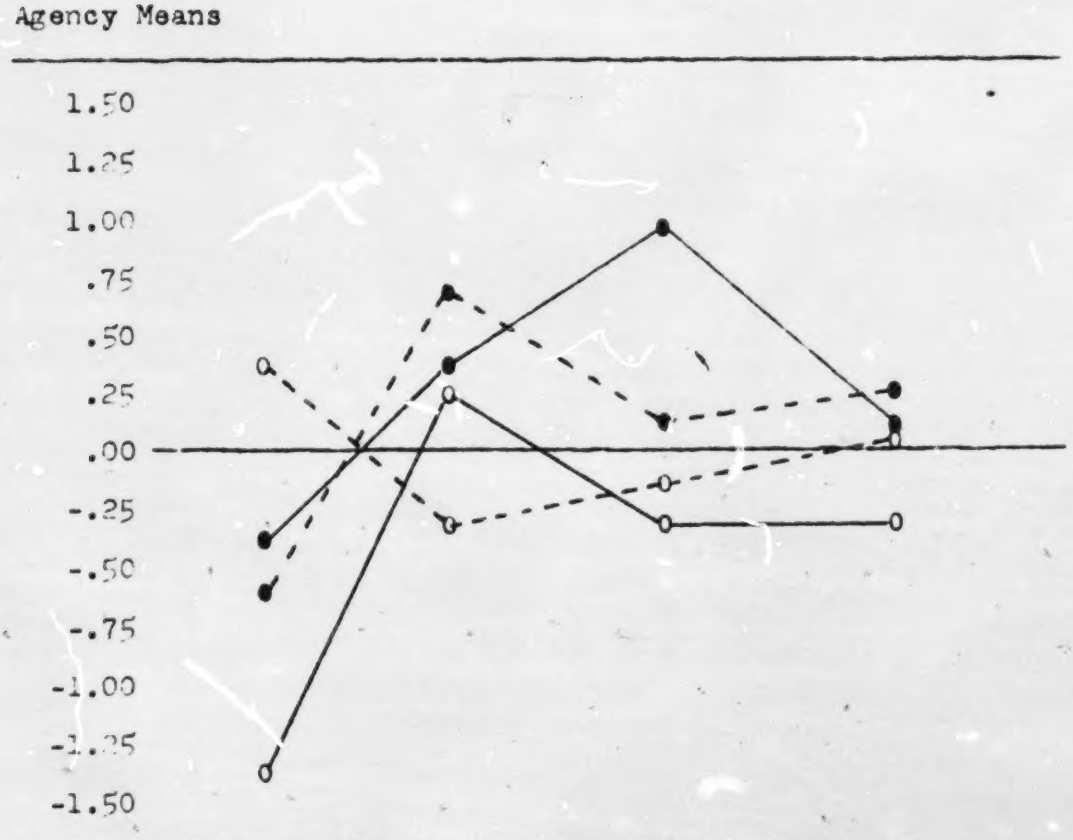

Figure 1. Mean factor score profiles for four agency types.

TABLE 1

Numbers and Percentages of Potential and Actual Cases by Facility Types

Facility Types	Potential Cases N	Potential Cases % of Total	Actual Cases N	Actual Cases % of Total
State Psychiatric Hospitals	46	7.2	39	9.9
Private Psychiatric Hospitals	24	3.8	8	2.0
General Hospitals with a Psychiatric Unit	78	12.2	35	8.8
General Hospitals without a Psychiatric Unit	37	5.8	0	0.0
Federal (VA) Psychiatric Hospitals	18	2.8	17	4.3
Regional or Community Mental Health Centers	265	41.6	191	48.2
Children's Treatment Centers	54	8.5	35	8.8
Adolescent Treatment Centers	24	3.8	13	3.3
Adult Special Treatment or Rehabilitation Centers	34	5.3	20	5.1
Others	52	8.2	38	9.6
Facility Type not Indicated	5	0.8	0	0.0
Totals	637	100.0	396	100.0

TABLE 2

Function and Model Survey Variables, with Short Titles

Function Variables	Short Titles
Engage in individual therapy or counseling with outpatients	Outpatient Individual Therapy
Engage in group therapy or counseling with outpatients	Outpatient Group Therapy
Engage in individual therapy or counseling with inpatients	Inpatient Individual Therapy
Engage in group therapy or counseling with inpatients	Inpatient Group Therapy
Supervise or coordinate ward milieu programs	Ward Milieu Coordination
Serve as behavioral consultants to other disciplines	Behavioral Consultation
Coordinate special treatment programs such as those for alcoholism, drug addiction, vocational rehabilitation, etc.	Special Treatment Coordination
Administer, score, and/or interpret psychological tests and assessment devices.	Testing
Work in primary prevention or crisis intervention programs	Prevention or Crisis Intervention
Work as a research assistant, collecting data and performing statistical operations.	Research Assistance

TABLE 2 (Continued)

Function Variables	Short Titles
Do independent research	Independent Research
Coordinate or administer a token economy ward	Token Economy Coordination
Consult in the community	Community Consultation
Other	Other

Model Variables	Short Titles
Primarily a psychometrician, with training well-grounded in principles of measurement, and prepared to administer and/or interpret and make recommendations from a variety of tests and assessment techniques	Psychometrician
Primarily a counselor or psychotherapist, prepared to do supervised work with individuals or groups	Therapist
Primarily an institutional and behavioral change agent, prepared to evaluate and alter both social systems and individual behaviors	Behavior Change Agent
A research technician, well-grounded in statistics, and research design	Research Technician
A community consultant with training well-grounded in the principles of community psychology	Community Consultant
Other	Other

TABLE 3

Salient Factor Loadings for Two Random Halves (A, B) with Orthogonal Rotation

	Factors							
Function Variables	AI	BII	AIII	BI	AVII	BV	AIV	BIII
Outpatient Individual Therapy	-	-	.90	.87	-	-	-	-
Outpatient Group Therapy	-	-	.75	.87	-	-	-	-
Inpatient Individual Therapy	.83	.81	-	-	-	-	-	-
Inpatient Group Therapy	.90	.83	-	-	-	-	-	-
Ward Milieu Coordination	.47	.37	-	-	-	-	-	-
Behavioral Consultation	-	-	-	-	-	-	-	-
Special Treatment Coordination	-	-	-	-	-	-	-	-
Testing	-	-	-	-	.52	.87	-	-
Prevention or Crisis Intervention	-	-	.36	.47	-	-	-	-
Research Assistance	-	-	-	-	-	-	.59	.50
Independent Research	-	-	-	-	-	-	-	-
Token Economy Coordination	-	-	-	-	-	-	-	-
Community Consultation	-	-	.43	.57	-	-	-	-
Other	-	-	-	-	-	-	-	-
Model Variables								
Psychometrician	-	-	-	-	.52	.44	-	-
Therapist	-	-	-	-	-	-	-	-
Behavior Change Agent	-	-	-	-	-	-	-	-
Research Technician	-	-	-	-	-	-	.77	.79
Community Consultant	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	.36	-

TABLE 4

Salient Factor Loadings for Two Random Halves (A, B) with Oblique Rotation (Delta = -5.00)

Function Variables	Factors							
	AI	BI	AII	BII	AIII	BIII	AIV	BVI
Outpatient Individual Therapy	.90	.80	-	-	-	-	-	.40
Outpatient Group Therapy	.78	.85	-	-	-	-	-	-
Inpatient Individual Therapy	-	-	.81	.81	-	-	-	-
Inpatient Group Therapy	-	-	.89	.85	-	-	-	-
Ward Milieu Coordination	-	-	.53	.43	-	-	-	-
Behavioral Consultation	-	-	-	-	-	-	-.52	.45
Special Treatment Coordination	-	-	-	-	-	-.65	-.36	.38
Testing	-	-	-	-	-	-	-	-
Prevention or Crisis Intervention	.49	.47	-	-	-	-	-.45	.36
Research Assistance	-	-	-	-	.63	-.53	-	-
Independent Research	-	-	-	-	.40	-.44	-	-
Token Economy Coordination	-	-	.40	-	-	-	-	-
Community Consultation	.54	.57	-	-	-	-	-.41	.49
Other	-	-	-	-	-	-	-	-
Model Variables								
Psychometrician	-	-	-	-	-	-	-	.50
Therapist	-	-	-	-	-	-	-	-
Behavior Change Agent	-	-	-	-	-	-	-.46	-
Research Technician	-	-	-	-	.72	-.43	-	-
Community Consultant	-	-	-	-	-	-	-.43	-
Other	-	-	-	-	.37	-	-	-

TABLE 5

Salient Factor Loadings for Two Random Halves (A, B) with Oblique Rotation (Delta = 0.00)

Function Variables	Factors							
	AI	BI	AII	BII	AIII	BIII	AVII	BIV
Outpatient Individual Therapy	.93	.87	-	-	-	-	-	-
Outpatient Group Therapy	.80	.86	-	-	-	-	-	-
Inpatient Individual Therapy	-	-	.83	.80	-	-	-	-
Inpatient Group Therapy	-	-	.91	.86	-	-	-	-
Ward Milieu Coordination	-	-	.53	.45	-	-	-	-
Behavioral Consultation	-	-	-	-	-	-	-	-
Special Treatment Coordination	-	-	-	-	-	-	-	-
Testing	-	-	-	-	-	-	.51	.86
Prevention or Crisis Intervention	.49	.51	-	-	-	-	-	-
Research Assistance	-	-	-	-	.61	-.56	-	-
Independent Research	-	-	-	-	-	-.38	-	-
Token Economy Coordination	-	-	.39	-	-	-	-	-
Community Consultation	.60	.62	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
Model Variables								
Psychometrician	-	-	-	-	-	-	.56	.46
Therapist	-	-	-	-	-	-	-	-
Behavior Change Agent	-	-	-	-	-	-	-	-
Research Technician	-	-	-	-	.77	-.79	-	-
Community Consultant	.36	-	-	-	-	-	-	-
Other	-	-	-	-	.39	-	-	-

TABLE 6

Salient Factor Loadings for Each Factor

Function Variables	Factors I	II	III	IV	V	VI	VII
Outpatient Individual Therapy	*.86	.02	-	-.09	-	.03	-
Outpatient Group Therapy	*.76	-.04	-	.02	-	.04	-
Inpatient Individual Therapy	.04	*.81	-	.10	-	.02	-
Inpatient Group Therapy	-.10	*.84	-	.10	-	.02	-
Ward Milieu Coordination	-.11	.33	.55	-.01	-	.01	-
Behavioral Consultation	.04	-.02	-	-.15	.57	.13	-
Special Treatment Coordination	.11	.08	-	.17	.42	-.06	-
Testing	.19	.01	-	.04	-	*.74	-
Prevention or Crisis Intervention	.32	-.09	-	.04	.51	.02	-
Research Assistance	.03	.07	-	*.66	-	.11	-
Independent Research	.07	.07	-	*.35	-	.02	-
Token Economy Coordination	-.01	.15	.59	.11	-	.00	-
Community Consultation	*.37	-.11	-	-.09	.63	-.01	-
Other	.04	.00	-	.03	-	-.01	.47

TABLE 6 (Continued)

Salient Factor Loadings for Each Factor

Model Variables	Factors I	II	III	IV	V	VI	VII
Psychometrician	-.19	.03	-	.13	-	*.42	-
Therapist	.10	.15	-	-.09	-	-.05	-
Behavior Change Agent	-.05	.06	-	.10	-	-.06	-
Research Technician	-.12	.03	-	*.66	-	.04	-
Community Consultant	.13	-.10	-	.12	.54	-.08	-
Other	-.03	.10	-	.26	-	.00	-
Percent of Variance Accounted for	17	13.9	8.0	6.8	6.2	5.6	5.2

Together Account for 62.8% of Total Variance.
*Salient Factor Loadings for the Retained Factors.

TABLE 7

Factor Score Intercorrelations

	Factors						
	I	II	III	IV	V	VI	VII
Factor I	1.0000	.0262	-.0895	-.0357	.1870	.0494	.0278
Factor II		1.0000	.1557	.0362	-.0546	-.0058	.0314
Factor III			1.0000	.0519	.1306	.0518	.1339
Factor IV				1.0000	.0109	.0538	.0743
Factor V					1.0000	-.0276	.0390
Factor VI						1.0000	-.0308
Factor VII							1.0000

TABLE 8

Mean Factor Scores and Standard Deviations for Each Agency Type

Agency Types	I Outpatient Therapy		II Inpatient Therapy		III Research Assistant		IV Psychological Testing	
	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.	$\bar{X}$	s.d.
State Hospitals	-0.547	1.009	0.712	0.399	0.167	0.942	0.318	0.413
Private Hospitals with a Psychiatric Unit	-0.361	1.038	0.028	0.850	0.277	1.184	0.098	0.673
General Hospitals with a Psychiatric Unit	-0.116	0.965	0.409	0.802	0.130	0.945	0.169	0.693
Federal (VA) Hospitals	-0.343	1.139	0.444	0.936	0.924	0.844	0.051	0.876
Community Mental Health Centers	0.360	0.564	-0.293	0.863	-0.127	0.731	0.001	0.718
Childrens Treatment Centers	-0.217	1.049	0.051	0.946	-0.318	0.508	0.076	0.759
Adolescent Treatment Centers	-1.317	0.513	0.249	0.786	-0.297	0.674	-0.442	1.189
Adult Special Treatment Center	-0.243	0.968	0.110	0.967	-0.143	0.506	-0.571	1.115
Others	-0.132	1.033	-0.034	0.961	0.344	0.958	-0.144	0.943
Total	-0.000	0.904	0.000	0.907	0.000	0.826	0.000	0.786

TABLE 9

Planned Comparisons for Factors I, II, and III

Factor	Comparison	d.f.	t	p
I	Community Mental Health Centers vs. State Hospitals	387	-6.331	≤.001
	Community Mental Health Centers vs. Federal (VA) Hospitals	387	-3.407	≤.001
II	Community Mental Health Centers vs. State Hospitals	387	6.740	≤.001
	Community Mental Health Centers vs. Federal (VA) Hospitals	387	3.435	≤.001
	Community Mental Health Centers vs. Adolescent Treatment Centers	387	-2.229	≤.026
III	Federal (VA) Hospitals vs. State Hospitals	387	-3.308	≤.001

Figure 2

Mean Factor Score Profiles of Children's Treatment Centers, Adult Special Treatment Centers, and Other Facilities

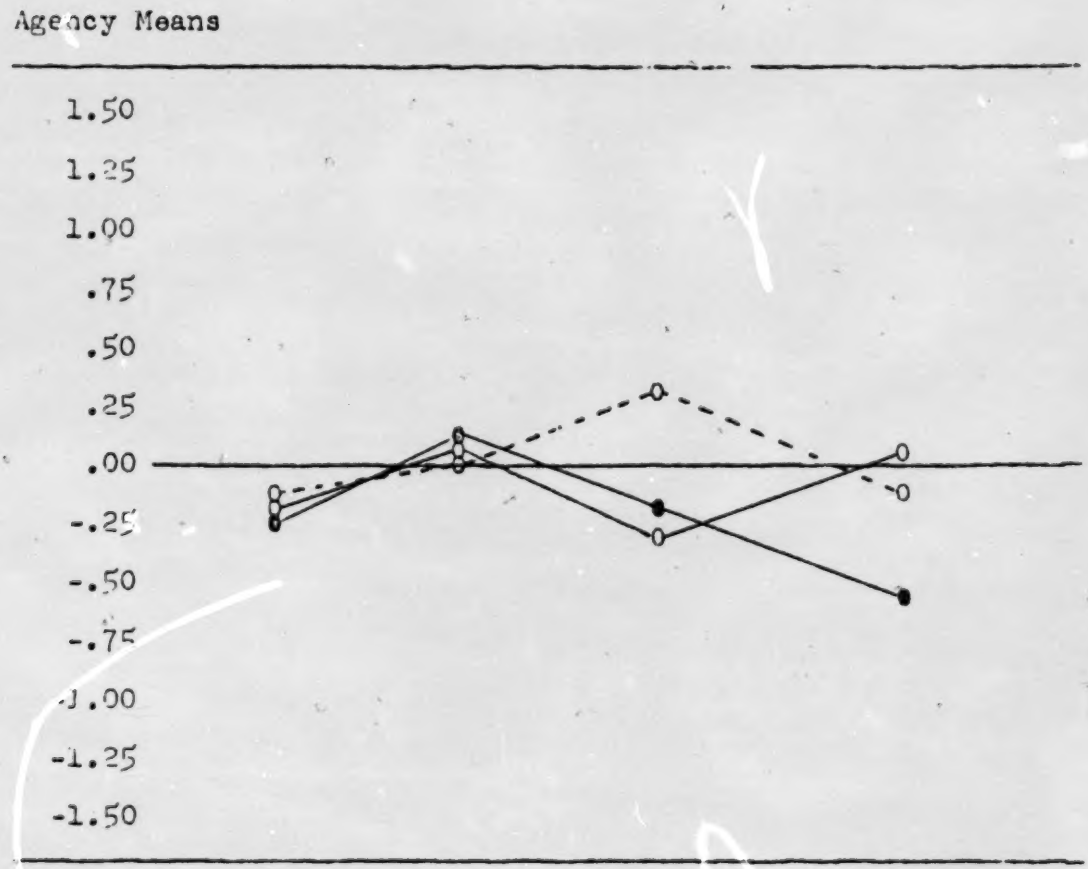

Figure 3

Mean Factor Score Profiles or Private Hospitals and General Hospitals